

Exhibit 13

Pace Test Results, Little Belews Creek Sample
December 9, 2016

January 11, 2017

Program Manager
Duke Energy
13339 Hagers Ferry Road
Bldg. 7405 MG3OA2
Huntersville, NC 28078

RE: Project: BELEWS J16090796
Pace Project No.: 92322876

Dear Program Manager:

Enclosed are the analytical results for sample(s) received by the laboratory on December 12, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring
kevin.herring@pacelabs.com
HORIZON Database Administrator

Enclosures

cc: Francisco Benzoni
Myra Blake
Sean DeNeale
Leslie Griffith
Patrick Hunter
Nash Long
Program Manager, Duke Energy
Melissa Romanzo
Brent Rosser

Nick Torrey



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: BELEWS J16090796
Pace Project No.: 92322876

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
Alaska Certification UST-107
525 N 8th Street, Salina, KS 67401
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Alabama Certification #40770
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: 8TMS-L
Florida/NELAP Certification #: E87605
Guam Certification #:14-008r
Georgia Certification #: 959
Georgia EPD #: Pace
Idaho Certification #: MN00064
Hawaii Certification #MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Kentucky Dept of Envi. Protection - WW #:90062
Louisiana DEQ Certification #: 3086
Louisiana DHH #: LA140001
Maine Certification #: 2013011
Maryland Certification #: 322

Michigan DEPH Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Carolina State Public Health #: 27700
North Dakota Certification #: R-036
Ohio EPA #: 4150
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Saipan (CNMI) #:MP0003
South Carolina #:74003001
Texas Certification #: T104704192
Tennessee Certification #: 02818
Utah Certification #: MN000642013-4
Virginia DGS Certification #: 251
Virginia/VELAP Certification #: Pace
Washington Certification #: C486
West Virginia Certification #: 382
West Virginia DHHR #:9952C
Wisconsin Certification #: 999407970

Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174
Alabama Certification #: 41320
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074

Nebraska Certification: NE-OS-28-14
Nevada Certification: FL NELAC Reciprocity
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
Wyoming Certification: FL NELAC Reciprocity
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

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CERTIFICATIONS

Project: BELEWS J16090796

Pace Project No.: 92322876

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

Greenwood Certification IDs

816 Durst Avenue East, Greenwood, SC 29649

South Carolina Laboratory ID #: 24562

North Carolina Division of Water Resources Certification
number 25

Florida Certification number E87633

Virginia VELAP ID: 460250

Asbestos NVLAP accreditation: 101410-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: BELEWS J16090796

Pace Project No.: 92322876

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92322876001	NORTH OF S-10+11	Water	12/09/16 14:30	12/12/16 08:00
92322876002	EB-JJZ-1	Water	12/09/16 15:30	12/12/16 08:00
92322876003	NORTH OF S-10 + 11 BLANK	Water	12/09/16 14:30	12/12/16 08:00
92322876004	EB-JJZ-1 BLANK	Water	12/09/16 15:30	12/12/16 08:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: BELEWS J16090796

Pace Project No.: 92322876

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92322876001	NORTH OF S-10+11	RSK 175	DR1	1	PASI-M
		EPA 300.0	CDC	3	PASI-W
		EPA 200.7	SH1	7	PASI-A
		EPA 200.7	SH1	11	PASI-A
		EPA 200.7	JMW	4	PASI-A
		EPA 200.8 Rev 5.4	CDF	13	PASI-A
		EPA 200.8 Rev 5.4	CDF	13	PASI-A
		EPA 1631E	ANB	1	PASI-A
		SM 2320B	KDF	3	PASI-A
		SM 2540C	MJS1	1	PASI-A
		SM 2540D	MJS1	1	PASI-A
		SM 4500-S2D	EWS	1	PASI-A
		EPA 218.7	AEM	1	PASI-O
		EPA 353.2	WRC	1	PASI-A
		SM 5310B	AES2	1	PASI-A
92322876002	EB-JJZ-1	RSK 175	DR1	1	PASI-M
		EPA 300.0	CDC	3	PASI-W
		EPA 200.7	SH1	7	PASI-A
		EPA 200.7	JMW	4	PASI-A
		EPA 200.8 Rev 5.4	CDF	13	PASI-A
		EPA 1631E	ANB	1	PASI-A
		SM 2320B	KDF	3	PASI-A
		SM 2540C	MJS1	1	PASI-A
		SM 2540D	MJS1	1	PASI-A
		SM 4500-S2D	EWS	1	PASI-A
		EPA 218.7	AEM	1	PASI-O
		EPA 353.2	WRC	1	PASI-A
		SM 5310B	AES2	1	PASI-A
92322876003	NORTH OF S-10 + 11 BLANK	EPA 1631E	ANB	1	PASI-A
92322876004	EB-JJZ-1 BLANK	EPA 1631E	ANB	1	PASI-A

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SUMMARY OF DETECTION

Project: BELEWS J16090796

Pace Project No.: 92322876

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92322876001	NORTH OF S-10+11					
RSK 175	Methane	3.4J	ug/L	10.0	12/23/16 17:39	
EPA 300.0	Bromide	5.2	mg/L	0.90	12/14/16 22:02	
EPA 300.0	Chloride	430	mg/L	9.0	12/14/16 22:02	
EPA 300.0	Sulfate	87.9	mg/L	1.0	12/14/16 12:53	
EPA 200.7	Aluminum	80.2J	ug/L	100	12/15/16 01:54	
EPA 200.7	Barium	234	ug/L	5.0	12/15/16 01:54	
EPA 200.7	Boron	8680	ug/L	50.0	12/15/16 01:54	
EPA 200.7	Iron	204	ug/L	50.0	12/15/16 12:23	
EPA 200.7	Manganese	7670	ug/L	5.0	12/15/16 12:23	
EPA 200.7	Strontium	656	ug/L	5.0	12/15/16 01:54	
EPA 200.7	Zinc	10.8	ug/L	10.0	12/15/16 12:23	
EPA 200.7	Aluminum, Dissolved	92.7J	ug/L	100	12/16/16 01:50	
EPA 200.7	Barium, Dissolved	257	ug/L	5.0	12/16/16 01:50	
EPA 200.7	Boron, Dissolved	9570	ug/L	50.0	12/16/16 01:50	
EPA 200.7	Calcium, Dissolved	162000	ug/L	1000	12/16/16 14:03	
EPA 200.7	Iron, Dissolved	169	ug/L	50.0	12/16/16 01:50	
EPA 200.7	Magnesium, Dissolved	48100	ug/L	100	12/16/16 01:50	
EPA 200.7	Manganese, Dissolved	7410	ug/L	5.0	12/16/16 01:50	
EPA 200.7	Potassium, Dissolved	5200	ug/L	5000	12/16/16 01:50	
EPA 200.7	Sodium, Dissolved	13200	ug/L	5000	12/16/16 01:50	
EPA 200.7	Strontium, Dissolved	686	ug/L	5.0	12/16/16 01:50	
EPA 200.7	Zinc, Dissolved	10.5	ug/L	10.0	12/16/16 01:50	
EPA 200.7	Calcium	172000	ug/L	1000	12/19/16 14:18	
EPA 200.7	Magnesium	57700	ug/L	100	12/16/16 16:52	
EPA 200.7	Potassium	8250	ug/L	5000	12/16/16 16:52	
EPA 200.7	Sodium	18700	ug/L	5000	12/16/16 16:52	
EPA 200.8 Rev 5.4	Arsenic	1.2	ug/L	0.10	12/15/16 12:44	
EPA 200.8 Rev 5.4	Beryllium	0.94	ug/L	0.10	12/15/16 12:44	
EPA 200.8 Rev 5.4	Cadmium	0.66	ug/L	0.080	12/15/16 12:44	
EPA 200.8 Rev 5.4	Chromium	0.13J	ug/L	0.50	12/15/16 12:44	
EPA 200.8 Rev 5.4	Cobalt	65.8	ug/L	0.10	12/15/16 12:44	
EPA 200.8 Rev 5.4	Copper	0.68	ug/L	0.50	12/15/16 12:44	
EPA 200.8 Rev 5.4	Nickel	12.1	ug/L	0.50	12/15/16 12:44	
EPA 200.8 Rev 5.4	Selenium	6.5	ug/L	0.50	12/15/16 12:44	
EPA 200.8 Rev 5.4	Thallium	0.38	ug/L	0.10	12/15/16 12:44	
EPA 200.8 Rev 5.4	Arsenic, Dissolved	1.1	ug/L	0.10	12/15/16 13:47	
EPA 200.8 Rev 5.4	Beryllium, Dissolved	1.1	ug/L	0.10	12/15/16 13:47	
EPA 200.8 Rev 5.4	Cadmium, Dissolved	0.63	ug/L	0.080	12/15/16 13:47	
EPA 200.8 Rev 5.4	Chromium, Dissolved	0.18J	ug/L	0.50	12/15/16 13:47	
EPA 200.8 Rev 5.4	Cobalt, Dissolved	62.5	ug/L	0.10	12/15/16 13:47	
EPA 200.8 Rev 5.4	Copper, Dissolved	0.65	ug/L	0.50	12/15/16 13:47	B
EPA 200.8 Rev 5.4	Nickel, Dissolved	11.7	ug/L	0.50	12/15/16 13:47	
EPA 200.8 Rev 5.4	Selenium, Dissolved	6.2	ug/L	0.50	12/15/16 13:47	
EPA 200.8 Rev 5.4	Thallium, Dissolved	0.34	ug/L	0.10	12/15/16 13:47	
EPA 1631E	Mercury	33.6	ng/L	0.50	12/14/16 11:40	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	4.8J	mg/L	5.0	12/14/16 02:40	
SM 2320B	Alkalinity, Total as CaCO3	4.8J	mg/L	5.0	12/14/16 02:40	
SM 2540C	Total Dissolved Solids	780	mg/L	50.0	12/14/16 20:47	

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SUMMARY OF DETECTION

Project: BELEWS J16090796

Pace Project No.: 92322876

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92322876001	NORTH OF S-10+11					
EPA 218.7	Chromium, Hexavalent	1.2	ug/L	0.62	12/21/16 10:56	
EPA 353.2	Nitrogen, NO2 plus NO3	0.10	mg/L	0.020	12/21/16 18:17	
92322876002	EB-JJZ-1					
RSK 175	Methane	1.9J	ug/L	10.0	12/23/16 17:55	
EPA 200.7	Zinc	39.4	ug/L	10.0	12/15/16 12:26	
EPA 1631E	Mercury	0.319J	ng/L	0.50	12/14/16 12:03	
EPA 218.7	Chromium, Hexavalent	0.019J	ug/L	0.025	12/21/16 09:25	

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: RSK 175

Description: RSK 175 AIR Headspace

Client: Duke Energy

Date: January 11, 2017

General Information:

2 samples were analyzed for RSK 175. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: EPA 300.0

Description: 3000 IC Anions 28 Days, GWD

Client: Duke Energy

Date: January 11, 2017

General Information:

2 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: BELEWS J16090796
Pace Project No.: 92322876

Method: EPA 200.7
Description: 200.7 MET ICP
Client: Duke Energy
Date: January 11, 2017

General Information:

2 samples were analyzed for EPA 200.7. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.7 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 340496

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92322679001,92322877001

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- MS (Lab ID: 1889893)
 - Aluminum
- MSD (Lab ID: 1889894)
 - Aluminum

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: EPA 200.7

Description: 200.7 MET ICP, Dissolved

Client: Duke Energy

Date: January 11, 2017

General Information:

1 sample was analyzed for EPA 200.7. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.7 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: EPA 200.7

Description: 200.7 MET ICP, No Prep

Client: Duke Energy

Date: January 11, 2017

General Information:

2 samples were analyzed for EPA 200.7. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 341069

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92322996058,92323208004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1892013)
 - Calcium
 - Magnesium
 - Potassium
 - Sodium
- MS (Lab ID: 1892015)
 - Calcium
 - Magnesium
 - Potassium
 - Sodium
- MSD (Lab ID: 1892014)
 - Calcium
 - Magnesium
 - Potassium
 - Sodium
- MSD (Lab ID: 1892016)
 - Calcium
 - Magnesium
 - Potassium
 - Sodium

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: EPA 200.7

Description: 200.7 MET ICP, No Prep

Client: Duke Energy

Date: January 11, 2017

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: EPA 200.8 Rev 5.4

Description: 200.8 MET ICPMS

Client: Duke Energy

Date: January 11, 2017

General Information:

2 samples were analyzed for EPA 200.8 Rev 5.4. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.8 Rev 5.4 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: EPA 200.8 Rev 5.4

Description: 200.8 MET ICPMS, Dissolved

Client: Duke Energy

Date: January 11, 2017

General Information:

1 sample was analyzed for EPA 200.8 Rev 5.4. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.8 Rev 5.4 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 340493

B: Analyte was detected in the associated method blank.

- BLANK for HBN 340493 [MPRP/241 (Lab ID: 1888523)
- Copper, Dissolved

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: EPA 1631E

Description: 1631E Mercury, Low Level

Client: Duke Energy

Date: January 11, 2017

General Information:

4 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: SM 2320B

Description: 2320B Alkalinity

Client: Duke Energy

Date: January 11, 2017

General Information:

2 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: SM 2540C

Description: 2540C Total Dissolved Solids

Client: Duke Energy

Date: January 11, 2017

General Information:

2 samples were analyzed for SM 2540C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 340794

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 1890242)
- Total Dissolved Solids

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: SM 2540D

Description: 2540D Total Suspended Solids

Client: Duke Energy

Date: January 11, 2017

General Information:

2 samples were analyzed for SM 2540D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 340920

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 1891244)
 - Total Suspended Solids
- DUP (Lab ID: 1891304)
 - Total Suspended Solids

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: SM 4500-S2D

Description: 4500S2D Sulfide Water

Client: Duke Energy

Date: January 11, 2017

General Information:

2 samples were analyzed for SM 4500-S2D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 340775

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92322877003,92323130001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1890153)
 - Sulfide
- MSD (Lab ID: 1890154)
 - Sulfide

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: EPA 218.7

Description: Hexavalent Chromium by IC

Client: Duke Energy

Date: January 11, 2017

General Information:

2 samples were analyzed for EPA 218.7. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: EPA 353.2

Description: 353.2 Nitrogen, NO₂/NO₃ pres.

Client: Duke Energy

Date: January 11, 2017

General Information:

2 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: BELEWS J16090796

Pace Project No.: 92322876

Method: SM 5310B

Description: 5310B TOC

Client: Duke Energy

Date: January 11, 2017

General Information:

2 samples were analyzed for SM 5310B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BELEWS J16090796

Pace Project No.: 92322876

Sample: NORTH OF S-10+11 Lab ID: 92322876001 Collected: 12/09/16 14:30 Received: 12/12/16 08:00 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 AIR Headspace Analytical Method: RSK 175									
Methane	3.4J	ug/L	10.0	0.49	1		12/23/16 17:39	74-82-8	
3000 IC Anions 28 Days, GWD Analytical Method: EPA 300.0									
Bromide	5.2	mg/L	0.90	0.45	9		12/14/16 22:02	24959-67-9	
Chloride	430	mg/L	9.0	0.90	9		12/14/16 22:02	16887-00-6	
Sulfate	87.9	mg/L	1.0	0.40	1		12/14/16 12:53	14808-79-8	
200.7 MET ICP Analytical Method: EPA 200.7 Preparation Method: EPA 200.7									
Aluminum	80.2J	ug/L	100	50.0	1	12/13/16 19:55	12/15/16 01:54	7429-90-5	
Barium	234	ug/L	5.0	2.5	1	12/13/16 19:55	12/15/16 01:54	7440-39-3	
Boron	8680	ug/L	50.0	25.0	1	12/13/16 19:55	12/15/16 01:54	7440-42-8	
Iron	204	ug/L	50.0	25.0	1	12/13/16 19:55	12/15/16 12:23	7439-89-6	
Manganese	7670	ug/L	5.0	2.5	1	12/13/16 19:55	12/15/16 12:23	7439-96-5	
Strontium	656	ug/L	5.0	2.5	1	12/13/16 19:55	12/15/16 01:54	7440-24-6	
Zinc	10.8	ug/L	10.0	2.5	1	12/13/16 19:55	12/15/16 12:23	7440-66-6	
200.7 MET ICP, Dissolved Analytical Method: EPA 200.7 Preparation Method: EPA 200.7									
Aluminum, Dissolved	92.7J	ug/L	100	50.0	1	12/15/16 13:34	12/16/16 01:50	7429-90-5	
Barium, Dissolved	257	ug/L	5.0	2.5	1	12/15/16 13:34	12/16/16 01:50	7440-39-3	
Boron, Dissolved	9570	ug/L	50.0	25.0	1	12/15/16 13:34	12/16/16 01:50	7440-42-8	
Calcium, Dissolved	162000	ug/L	1000	500	10	12/15/16 13:34	12/16/16 14:03	7440-70-2	
Iron, Dissolved	169	ug/L	50.0	25.0	1	12/15/16 13:34	12/16/16 01:50	7439-89-6	
Magnesium, Dissolved	48100	ug/L	100	50.0	1	12/15/16 13:34	12/16/16 01:50	7439-95-4	
Manganese, Dissolved	7410	ug/L	5.0	2.5	1	12/15/16 13:34	12/16/16 01:50	7439-96-5	
Potassium, Dissolved	5200	ug/L	5000	2500	1	12/15/16 13:34	12/16/16 01:50	7440-09-7	
Sodium, Dissolved	13200	ug/L	5000	500	1	12/15/16 13:34	12/16/16 01:50	7440-23-5	
Strontium, Dissolved	686	ug/L	5.0	2.5	1	12/15/16 13:34	12/16/16 01:50	7440-24-6	
Zinc, Dissolved	10.5	ug/L	10.0	2.5	1	12/15/16 13:34	12/16/16 01:50	7440-66-6	
200.7 MET ICP, No Prep Analytical Method: EPA 200.7									
Calcium	172000	ug/L	1000	500	10		12/19/16 14:18	7440-70-2	
Magnesium	57700	ug/L	100	50.0	1		12/16/16 16:52	7439-95-4	
Potassium	8250	ug/L	5000	2500	1		12/16/16 16:52	7440-09-7	
Sodium	18700	ug/L	5000	500	1		12/16/16 16:52	7440-23-5	
200.8 MET ICPMS Analytical Method: EPA 200.8 Rev 5.4 Preparation Method: EPA 200.8 Rev 5.4									
Antimony	ND	ug/L	0.50	0.10	1	12/13/16 18:40	12/15/16 12:44	7440-36-0	
Arsenic	1.2	ug/L	0.10	0.040	1	12/13/16 18:40	12/15/16 12:44	7440-38-2	
Beryllium	0.94	ug/L	0.10	0.010	1	12/13/16 18:40	12/15/16 12:44	7440-41-7	
Cadmium	0.66	ug/L	0.080	0.050	1	12/13/16 18:40	12/15/16 12:44	7440-43-9	
Chromium	0.13J	ug/L	0.50	0.090	1	12/13/16 18:40	12/15/16 12:44	7440-47-3	
Cobalt	65.8	ug/L	0.10	0.010	1	12/13/16 18:40	12/15/16 12:44	7440-48-4	
Copper	0.68	ug/L	0.50	0.11	1	12/13/16 18:40	12/15/16 12:44	7440-50-8	
Lead	ND	ug/L	0.10	0.090	1	12/13/16 18:40	12/15/16 12:44	7439-92-1	
Molybdenum	ND	ug/L	0.50	0.11	1	12/13/16 18:40	12/15/16 12:44	7439-98-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BELEWS J16090796

Pace Project No.: 92322876

Sample: NORTH OF S-10+11		Lab ID: 92322876001		Collected: 12/09/16 14:30		Received: 12/12/16 08:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS		Analytical Method: EPA 200.8 Rev 5.4 Preparation Method: EPA 200.8 Rev 5.4							
Nickel	12.1	ug/L	0.50	0.44	1	12/13/16 18:40	12/15/16 12:44	7440-02-0	
Selenium	6.5	ug/L	0.50	0.31	1	12/13/16 18:40	12/15/16 12:44	7782-49-2	
Thallium	0.38	ug/L	0.10	0.015	1	12/13/16 18:40	12/15/16 12:44	7440-28-0	
Vanadium	ND	ug/L	0.30	0.070	1	12/13/16 18:40	12/15/16 12:44	7440-62-2	
200.8 MET ICPMS, Dissolved		Analytical Method: EPA 200.8 Rev 5.4 Preparation Method: EPA 200.8 Rev 5.4							
Antimony, Dissolved	ND	ug/L	0.50	0.10	1	12/13/16 20:00	12/15/16 13:47	7440-36-0	
Arsenic, Dissolved	1.1	ug/L	0.10	0.040	1	12/13/16 20:00	12/15/16 13:47	7440-38-2	
Beryllium, Dissolved	1.1	ug/L	0.10	0.010	1	12/13/16 20:00	12/15/16 13:47	7440-41-7	
Cadmium, Dissolved	0.63	ug/L	0.080	0.050	1	12/13/16 20:00	12/15/16 13:47	7440-43-9	
Chromium, Dissolved	0.18J	ug/L	0.50	0.090	1	12/13/16 20:00	12/15/16 13:47	7440-47-3	
Cobalt, Dissolved	62.5	ug/L	0.10	0.010	1	12/13/16 20:00	12/15/16 13:47	7440-48-4	
Copper, Dissolved	0.65	ug/L	0.50	0.11	1	12/13/16 20:00	12/15/16 13:47	7440-50-8	B
Lead, Dissolved	ND	ug/L	0.10	0.090	1	12/13/16 20:00	12/15/16 13:47	7439-92-1	
Molybdenum, Dissolved	ND	ug/L	0.50	0.11	1	12/13/16 20:00	12/15/16 13:47	7439-98-7	
Nickel, Dissolved	11.7	ug/L	0.50	0.44	1	12/13/16 20:00	12/15/16 13:47	7440-02-0	
Selenium, Dissolved	6.2	ug/L	0.50	0.31	1	12/13/16 20:00	12/15/16 13:47	7782-49-2	
Thallium, Dissolved	0.34	ug/L	0.10	0.015	1	12/13/16 20:00	12/15/16 13:47	7440-28-0	
Vanadium, Dissolved	ND	ug/L	0.30	0.070	1	12/13/16 20:00	12/15/16 13:47	7440-62-2	
1631E Mercury, Low Level		Analytical Method: EPA 1631E Preparation Method: EPA 1631E							
Mercury	33.6	ng/L	0.50	0.25	1	12/14/16 08:37	12/14/16 11:40	7439-97-6	
2320B Alkalinity		Analytical Method: SM 2320B							
Alkalinity, Bicarbonate (CaCO ₃)	4.8J	mg/L	5.0	1.0	1		12/14/16 02:40		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	5.0	1.0	1		12/14/16 02:40		
Alkalinity, Total as CaCO ₃	4.8J	mg/L	5.0	1.0	1		12/14/16 02:40		
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	780	mg/L	50.0	50.0	1		12/14/16 20:47		
2540D Total Suspended Solids		Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	2.5	2.5	1		12/14/16 19:42		
4500S2D Sulfide Water		Analytical Method: SM 4500-S2D							
Sulfide	ND	mg/L	0.10	0.10	1		12/14/16 12:45	18496-25-8	
Hexavalent Chromium by IC		Analytical Method: EPA 218.7							
Chromium, Hexavalent	1.2	ug/L	0.62	0.20	25		12/21/16 10:56	18540-29-9	
353.2 Nitrogen, NO₂/NO₃ pres.		Analytical Method: EPA 353.2							
Nitrogen, NO ₂ plus NO ₃	0.10	mg/L	0.020	0.010	1		12/21/16 18:17		
5310B TOC		Analytical Method: SM 5310B							
Total Organic Carbon	ND	mg/L	1.0	0.50	1		12/20/16 15:07	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BELEWS J16090796

Pace Project No.: 92322876

Sample: EB-JJZ-1		Lab ID: 92322876002		Collected: 12/09/16 15:30		Received: 12/12/16 08:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 AIR Headspace Analytical Method: RSK 175									
Methane	1.9J	ug/L	10.0	0.49	1		12/23/16 17:55	74-82-8	
3000 IC Anions 28 Days, GWD Analytical Method: EPA 300.0									
Bromide	ND	mg/L	0.10	0.050	1		12/14/16 13:47	24959-67-9	
Chloride	ND	mg/L	1.0	0.10	1		12/14/16 13:47	16887-00-6	
Sulfate	ND	mg/L	1.0	0.40	1		12/14/16 13:47	14808-79-8	
200.7 MET ICP Analytical Method: EPA 200.7 Preparation Method: EPA 200.7									
Aluminum	ND	ug/L	100	50.0	1	12/13/16 19:55	12/15/16 02:07	7429-90-5	
Barium	ND	ug/L	5.0	2.5	1	12/13/16 19:55	12/15/16 02:07	7440-39-3	
Boron	ND	ug/L	50.0	25.0	1	12/13/16 19:55	12/15/16 02:07	7440-42-8	
Iron	ND	ug/L	50.0	25.0	1	12/13/16 19:55	12/15/16 12:26	7439-89-6	
Manganese	ND	ug/L	5.0	2.5	1	12/13/16 19:55	12/15/16 12:26	7439-96-5	
Strontium	ND	ug/L	5.0	2.5	1	12/13/16 19:55	12/15/16 02:07	7440-24-6	
Zinc	39.4	ug/L	10.0	2.5	1	12/13/16 19:55	12/15/16 12:26	7440-66-6	
200.7 MET ICP, No Prep Analytical Method: EPA 200.7									
Calcium	ND	ug/L	100	50.0	1		12/16/16 16:57	7440-70-2	
Magnesium	ND	ug/L	100	50.0	1		12/16/16 16:57	7439-95-4	
Potassium	ND	ug/L	5000	2500	1		12/16/16 16:57	7440-09-7	
Sodium	ND	ug/L	5000	500	1		12/16/16 16:57	7440-23-5	
200.8 MET ICPMS Analytical Method: EPA 200.8 Rev 5.4 Preparation Method: EPA 200.8 Rev 5.4									
Antimony	ND	ug/L	0.50	0.10	1	12/13/16 18:40	12/15/16 12:46	7440-36-0	
Arsenic	ND	ug/L	0.10	0.040	1	12/13/16 18:40	12/15/16 12:46	7440-38-2	
Beryllium	ND	ug/L	0.10	0.010	1	12/13/16 18:40	12/15/16 12:46	7440-41-7	
Cadmium	ND	ug/L	0.080	0.050	1	12/13/16 18:40	12/15/16 12:46	7440-43-9	
Chromium	ND	ug/L	0.50	0.090	1	12/13/16 18:40	12/15/16 12:46	7440-47-3	
Cobalt	ND	ug/L	0.10	0.010	1	12/13/16 18:40	12/15/16 12:46	7440-48-4	
Copper	ND	ug/L	0.50	0.11	1	12/13/16 18:40	12/15/16 12:46	7440-50-8	
Lead	ND	ug/L	0.10	0.090	1	12/13/16 18:40	12/15/16 12:46	7439-92-1	
Molybdenum	ND	ug/L	0.50	0.11	1	12/13/16 18:40	12/15/16 12:46	7439-98-7	
Nickel	ND	ug/L	0.50	0.44	1	12/13/16 18:40	12/15/16 12:46	7440-02-0	
Selenium	ND	ug/L	0.50	0.31	1	12/13/16 18:40	12/15/16 12:46	7782-49-2	
Thallium	ND	ug/L	0.10	0.015	1	12/13/16 18:40	12/15/16 12:46	7440-28-0	
Vanadium	ND	ug/L	0.30	0.070	1	12/13/16 18:40	12/15/16 12:46	7440-62-2	
1631E Mercury,Low Level Analytical Method: EPA 1631E Preparation Method: EPA 1631E									
Mercury	0.319J	ng/L	0.50	0.25	1	12/14/16 08:37	12/14/16 12:03	7439-97-6	
2320B Alkalinity Analytical Method: SM 2320B									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	1.0	1		12/14/16 02:48		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	1.0	1		12/14/16 02:48		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	1.0	1		12/14/16 02:48		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BELEWS J16090796

Pace Project No.: 92322876

Sample: EB-JJZ-1		Lab ID: 92322876002		Collected: 12/09/16 15:30		Received: 12/12/16 08:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		12/14/16 20:48		
2540D Total Suspended Solids		Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	2.5	2.5	1		12/14/16 19:43		
4500S2D Sulfide Water		Analytical Method: SM 4500-S2D							
Sulfide	ND	mg/L	0.10	0.10	1		12/14/16 12:45	18496-25-8	
Hexavalent Chromium by IC		Analytical Method: EPA 218.7							
Chromium, Hexavalent	0.019J	ug/L	0.025	0.0082	1		12/21/16 09:25	18540-29-9	
353.2 Nitrogen, NO2/NO3 pres.		Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.020	0.010	1		12/21/16 18:20		
5310B TOC		Analytical Method: SM 5310B							
Total Organic Carbon	ND	mg/L	1.0	0.50	1		12/20/16 04:44	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BELEWS J16090796

Pace Project No.: 92322876

Sample: NORTH OF S-10 + 11
BLANK **Lab ID:** 92322876003 Collected: 12/09/16 14:30 Received: 12/12/16 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level									
Analytical Method: EPA 1631E Preparation Method: EPA 1631E									
Mercury	ND	ng/L	0.50	0.25	1	12/14/16 08:37	12/14/16 12:18	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BELEWS J16090796

Pace Project No.: 92322876

Sample: EB-JJZ-1 BLANK		Lab ID: 92322876004		Collected: 12/09/16 15:30		Received: 12/12/16 08:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury,Low Level		Analytical Method: EPA 1631E Preparation Method: EPA 1631E							
Mercury	ND	ng/L	0.50	0.25	1	12/14/16 08:37	12/14/16 12:25	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

QC Batch: 453165

Analysis Method: RSK 175

QC Batch Method: RSK 175

Analysis Description: RSK 175 AIR HEADSPACE

Associated Lab Samples: 92322876001, 92322876002

METHOD BLANK: 2480699

Matrix: Water

Associated Lab Samples: 92322876001, 92322876002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Methane	ug/L	2.0J	10.0	0.49	12/23/16 15:51	

LABORATORY CONTROL SAMPLE & LCSD: 2480700

2480701

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	60.7	62.3	60.9	103	100	85-115	2	20	

SAMPLE DUPLICATE: 2482107

Parameter	Units	92323450018 Result	Dup Result	RPD	Max RPD	Qualifiers
Methane	ug/L	1.4J	1.2J		20	

SAMPLE DUPLICATE: 2482108

Parameter	Units	92322876001 Result	Dup Result	RPD	Max RPD	Qualifiers
Methane	ug/L	3.4J	3.4J		20	

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

QC Batch: 340766

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Analysis Description: 3000 IC Anions, GWD

Associated Lab Samples: 92322876001, 92322876002

METHOD BLANK: 1890116

Matrix: Water

Associated Lab Samples: 92322876001, 92322876002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Bromide	mg/L	ND	0.10	0.050	12/14/16 09:34	
Chloride	mg/L	ND	1.0	0.10	12/14/16 09:34	
Sulfate	mg/L	ND	1.0	0.40	12/14/16 09:34	

LABORATORY CONTROL SAMPLE: 1890117

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	2.5	2.4	95	90-110	
Chloride	mg/L	50	49.6	99	90-110	
Sulfate	mg/L	50	47.8	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1890118 1890119

Parameter	Units	92322493001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Bromide	mg/L	0.21	2.5	2.5	2.6	2.7	96	99	90-110	3	20	
Chloride	mg/L	23.9	50	50	74.5	75.4	101	103	90-110	1	20	
Sulfate	mg/L	15.5	50	50	66.7	66.9	102	103	90-110	0	20	

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

QC Batch: 341069

Analysis Method: EPA 200.7

QC Batch Method: EPA 200.7

Analysis Description: ICP Metals, Trace, No Prep

Associated Lab Samples: 92322876001, 92322876002

METHOD BLANK: 1892011

Matrix: Water

Associated Lab Samples: 92322876001, 92322876002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	ug/L	ND	100	50.0	12/16/16 16:33	
Magnesium	ug/L	ND	100	50.0	12/16/16 16:33	
Potassium	ug/L	ND	5000	2500	12/16/16 16:33	
Sodium	ug/L	ND	5000	500	12/16/16 16:33	

LABORATORY CONTROL SAMPLE: 1892012

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	ug/L	5000	5020	100	85-115	
Magnesium	ug/L	5000	5380	108	85-115	
Potassium	ug/L	5000	5330	107	85-115	
Sodium	ug/L	5000	5110	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1892013

1892014

Parameter	Units	92322996058 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L	ND	5000	5000	871	867	17	17	70-130	0	20	M1
Magnesium	ug/L	ND	5000	5000	961	957	19	19	70-130	0	20	M1
Potassium	ug/L	ND	5000	5000	ND	ND	18	18	70-130		20	M1
Sodium	ug/L	ND	5000	5000	968J	963J	16	16	70-130		20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1892015

1892016

Parameter	Units	92323208004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L	20200	5000	5000	21000	21000	15	15	70-130	0	20	M1
Magnesium	ug/L	6030	5000	5000	6790	6700	15	13	70-130	1	20	M1
Potassium	ug/L	3070J	5000	5000	4040J	3990J	19	18	70-130		20	M1
Sodium	ug/L	13100	5000	5000	14000	13800	18	14	70-130	2	20	M1

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

QC Batch: 340763 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury, Low Level
Associated Lab Samples: 92322876001, 92322876002, 92322876003, 92322876004

METHOD BLANK: 1890100 Matrix: Water
Associated Lab Samples: 92322876001, 92322876002, 92322876003, 92322876004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ng/L	ND	0.50	0.25	12/14/16 10:08	

METHOD BLANK: 1890101 Matrix: Water
Associated Lab Samples: 92322876001, 92322876002, 92322876003, 92322876004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ng/L	ND	0.50	0.25	12/14/16 12:10	

METHOD BLANK: 1890102 Matrix: Water
Associated Lab Samples: 92322876001, 92322876002, 92322876003, 92322876004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ng/L	ND	0.50	0.25	12/14/16 13:35	

LABORATORY CONTROL SAMPLE: 1890103

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ng/L	5	4.84	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1890104 1890105

Parameter	Units	92322872001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1.77	25	25	27.0	26.9	101	101	71-125	0	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1890106 1890107

Parameter	Units	92322876001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	33.6	25	25	57.1	57.3	94	95	71-125	0	24	

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

QC Batch: 340496

Analysis Method: EPA 200.7

QC Batch Method: EPA 200.7

Analysis Description: 200.7 MET

Associated Lab Samples: 92322876001, 92322876002

METHOD BLANK: 1888539

Matrix: Water

Associated Lab Samples: 92322876001, 92322876002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	ug/L	ND	100	50.0	12/15/16 01:08	
Barium	ug/L	ND	5.0	2.5	12/15/16 01:08	
Boron	ug/L	ND	50.0	25.0	12/15/16 01:08	
Iron	ug/L	ND	50.0	25.0	12/15/16 01:08	
Manganese	ug/L	ND	5.0	2.5	12/15/16 01:08	
Strontium	ug/L	ND	5.0	2.5	12/15/16 01:08	
Zinc	ug/L	ND	10.0	2.5	12/15/16 11:49	

LABORATORY CONTROL SAMPLE: 1888540

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	4820	96	85-115	
Barium	ug/L	500	489	98	85-115	
Boron	ug/L	500	485	97	85-115	
Iron	ug/L	5000	4630	93	85-115	
Manganese	ug/L	500	464	93	85-115	
Strontium	ug/L	500	487	97	85-115	
Zinc	ug/L	500	507	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1889893 1889894

Parameter	Units	92322679001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	32.8 mg/L	5000	5000	40900	40300	163	151	70-130	2	20	M6
Barium	ug/L	0.21 mg/L	500	500	691	698	95	97	70-130	1	20	
Boron	ug/L	ND	500	500	584	610	90	95	70-130	4	20	
Iron	ug/L	24.6 mg/L	5000	5000	29100	29200	91	93	70-130	0	20	
Manganese	ug/L	0.48 mg/L	500	500	928	936	90	92	70-130	1	20	
Strontium	ug/L	0.079 mg/L	500	500	558	564	96	97	70-130	1	20	
Zinc	ug/L	4.3 mg/L	500	500	4800	4800	107	106	70-130	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1889897 1889898

Parameter	Units	92322877001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	61.8J	5000	5000	4820	4830	95	95	70-130	0	20	

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1889897 1889898											
Parameter	Units	92322877001	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		Result									
Barium	ug/L	40.5	500	500	520	522	96	96	70-130	0	20
Boron	ug/L	ND	500	500	478	481	94	95	70-130	1	20
Iron	ug/L	53.8	5000	5000	5140	5090	102	101	70-130	1	20
Manganese	ug/L	46.9	500	500	561	553	103	101	70-130	2	20
Strontium	ug/L	332	500	500	810	817	96	97	70-130	1	20
Zinc	ug/L	2.6J	500	500	512	509	102	101	70-130	1	20

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QUALITY CONTROL DATA

Project: BELEWS J16090796
Pace Project No.: 92322876

QC Batch:	340915	Analysis Method:	EPA 200.7
QC Batch Method:	EPA 200.7	Analysis Description:	200.7 MET Dissolved
Associated Lab Samples:	92322876001		

METHOD BLANK: 1891192 Matrix: Water
Associated Lab Samples: 92322876001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	ND	100	50.0	12/16/16 00:15	
Barium, Dissolved	ug/L	ND	5.0	2.5	12/16/16 00:15	
Boron, Dissolved	ug/L	ND	50.0	25.0	12/16/16 00:15	
Calcium, Dissolved	ug/L	ND	100	50.0	12/16/16 00:15	
Iron, Dissolved	ug/L	ND	50.0	25.0	12/16/16 00:15	
Magnesium, Dissolved	ug/L	ND	100	50.0	12/16/16 00:15	
Manganese, Dissolved	ug/L	ND	5.0	2.5	12/16/16 00:15	
Potassium, Dissolved	ug/L	ND	5000	2500	12/16/16 00:15	
Sodium, Dissolved	ug/L	ND	5000	500	12/16/16 00:15	
Strontium, Dissolved	ug/L	ND	5.0	2.5	12/16/16 00:15	
Zinc, Dissolved	ug/L	ND	10.0	2.5	12/16/16 00:15	

LABORATORY CONTROL SAMPLE: 1891193

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	5000	5080	102	85-115	
Barium, Dissolved	ug/L	500	514	103	85-115	
Boron, Dissolved	ug/L	500	500	100	85-115	
Calcium, Dissolved	ug/L	5000	5100	102	85-115	
Iron, Dissolved	ug/L	5000	4930	99	85-115	
Magnesium, Dissolved	ug/L	5000	4860	97	85-115	
Manganese, Dissolved	ug/L	500	500	100	85-115	
Potassium, Dissolved	ug/L	5000	5050	101	85-115	
Sodium, Dissolved	ug/L	5000	4930J	99	85-115	
Strontium, Dissolved	ug/L	500	507	101	85-115	
Zinc, Dissolved	ug/L	500	513	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1891194 1891195

Parameter	Units	92322890002 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max	Qual
			Spike Conc.	Spike Conc.							RPD	
Aluminum, Dissolved	ug/L	ND	5000	5000	5300	5260	105	104	70-130	1	20	
Barium, Dissolved	ug/L	44.8	500	500	575	569	106	105	70-130	1	20	
Boron, Dissolved	ug/L	ND	500	500	524	528	104	104	70-130	1	20	
Calcium, Dissolved	ug/L	13400	5000	5000	18500	18300	102	98	70-130	1	20	
Iron, Dissolved	ug/L	ND	5000	5000	5170	5110	103	102	70-130	1	20	
Magnesium, Dissolved	ug/L	5650	5000	5000	10600	10600	99	99	70-130	0	20	
Manganese, Dissolved	ug/L	ND	500	500	518	522	103	104	70-130	1	20	

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1891194 1891195											
Parameter	Units	92322890002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Potassium, Dissolved	ug/L	ND	5000	5000	6980	6900	105	103	70-130	1	20
Sodium, Dissolved	ug/L	8750	5000	5000	13600	13500	98	95	70-130	1	20
Strontium, Dissolved	ug/L	111	500	500	636	631	105	104	70-130	1	20
Zinc, Dissolved	ug/L	ND	500	500	544	551	109	110	70-130	1	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1891196 1891197											
Parameter	Units	92322890012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Aluminum, Dissolved	ug/L	ND	5000	5000	5250	5300	104	105	70-130	1	20
Barium, Dissolved	ug/L	18.5	500	500	550	554	106	107	70-130	1	20
Boron, Dissolved	ug/L	32.3J	500	500	561	569	106	107	70-130	1	20
Calcium, Dissolved	ug/L	36600	5000	5000	41400	41200	95	92	70-130	0	20
Iron, Dissolved	ug/L	ND	5000	5000	4920	5040	98	101	70-130	2	20
Magnesium, Dissolved	ug/L	6990	5000	5000	11700	12000	95	99	70-130	2	20
Manganese, Dissolved	ug/L	19.3	500	500	520	532	100	103	70-130	2	20
Potassium, Dissolved	ug/L	9880	5000	5000	14900	15000	100	101	70-130	0	20
Sodium, Dissolved	ug/L	50700	5000	5000	55200	55500	89	97	70-130	1	20
Strontium, Dissolved	ug/L	191	500	500	700	707	102	103	70-130	1	20
Zinc, Dissolved	ug/L	ND	500	500	537	540	107	108	70-130	1	20

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

QC Batch: 340490 Analysis Method: EPA 200.8 Rev 5.4
QC Batch Method: EPA 200.8 Rev 5.4 Analysis Description: 200.8 MET
Associated Lab Samples: 92322876001, 92322876002

METHOD BLANK: 1888505 Matrix: Water

Associated Lab Samples: 92322876001, 92322876002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	0.50	0.10	12/15/16 12:25	
Arsenic	ug/L	ND	0.10	0.040	12/15/16 12:25	
Beryllium	ug/L	ND	0.10	0.010	12/15/16 12:25	
Cadmium	ug/L	ND	0.080	0.050	12/15/16 12:25	
Chromium	ug/L	ND	0.50	0.090	12/15/16 12:25	
Cobalt	ug/L	ND	0.10	0.010	12/15/16 12:25	
Copper	ug/L	ND	0.50	0.11	12/15/16 12:25	
Lead	ug/L	ND	0.10	0.090	12/15/16 12:25	
Molybdenum	ug/L	ND	0.50	0.11	12/15/16 12:25	
Nickel	ug/L	ND	0.50	0.44	12/15/16 12:25	
Selenium	ug/L	ND	0.50	0.31	12/15/16 12:25	
Thallium	ug/L	ND	0.10	0.015	12/15/16 12:25	
Vanadium	ug/L	ND	0.30	0.070	12/15/16 12:25	

LABORATORY CONTROL SAMPLE: 1888506

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	100	99.6	100	85-115	
Arsenic	ug/L	100	101	101	85-115	
Beryllium	ug/L	100	106	106	85-115	
Cadmium	ug/L	100	104	104	85-115	
Chromium	ug/L	100	104	104	85-115	
Cobalt	ug/L	100	105	105	85-115	
Copper	ug/L	100	109	109	85-115	
Lead	ug/L	100	102	102	85-115	
Molybdenum	ug/L	100	101	101	85-115	
Nickel	ug/L	100	109	109	85-115	
Selenium	ug/L	100	101	101	85-115	
Thallium	ug/L	100	104	104	85-115	
Vanadium	ug/L	100	104	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888507 1888508

Parameter	Units	92322872001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	0.13J	100	100	103	104	103	104	70-130	1	20	
Arsenic	ug/L	0.23	100	100	104	103	104	103	70-130	1	20	
Beryllium	ug/L	0.051J	100	100	103	103	103	103	70-130	0	20	

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888507											
1888508											
Parameter	Units	92322872001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Cadmium	ug/L	ND	100	100	102	102	102	102	70-130	0	20
Chromium	ug/L	0.87	100	100	102	103	101	102	70-130	1	20
Cobalt	ug/L	0.33	100	100	104	105	104	105	70-130	1	20
Copper	ug/L	1.5	100	100	107	108	106	106	70-130	0	20
Lead	ug/L	0.62	100	100	102	102	101	102	70-130	1	20
Molybdenum	ug/L	0.41J	100	100	101	102	101	101	70-130	0	20
Nickel	ug/L	0.64	100	100	106	107	105	106	70-130	1	20
Selenium	ug/L	ND	100	100	102	102	102	101	70-130	1	20
Thallium	ug/L	ND	100	100	101	103	101	103	70-130	1	20
Vanadium	ug/L	2.2	100	100	106	107	103	105	70-130	1	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888509											
1888510											
Parameter	Units	92322877005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Antimony	ug/L	ND	100	100	101	105	101	105	70-130	4	20
Arsenic	ug/L	0.089J	100	100	103	104	103	103	70-130	1	20
Beryllium	ug/L	0.016J	100	100	103	107	103	107	70-130	4	20
Cadmium	ug/L	ND	100	100	101	104	101	104	70-130	2	20
Chromium	ug/L	1.2	100	100	100	104	99	102	70-130	3	20
Cobalt	ug/L	0.032J	100	100	99.6	102	100	102	70-130	3	20
Copper	ug/L	0.90	100	100	101	104	100	103	70-130	3	20
Lead	ug/L	ND	100	100	99.2	100	99	100	70-130	1	20
Molybdenum	ug/L	ND	100	100	101	103	101	103	70-130	2	20
Nickel	ug/L	0.92	100	100	102	105	101	104	70-130	3	20
Selenium	ug/L	ND	100	100	99.3	103	99	103	70-130	3	20
Thallium	ug/L	ND	100	100	99.5	103	99	103	70-130	3	20
Vanadium	ug/L	1.3	100	100	102	106	101	105	70-130	3	20

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BELEWS J16090796
Pace Project No.: 92322876

QC Batch:	340493	Analysis Method:	EPA 200.8 Rev 5.4
QC Batch Method:	EPA 200.8 Rev 5.4	Analysis Description:	200.8 MET Dissolved
Associated Lab Samples:	92322876001		

METHOD BLANK: 1888523 Matrix: Water
Associated Lab Samples: 92322876001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony, Dissolved	ug/L	ND	0.50	0.10	12/15/16 13:28	
Arsenic, Dissolved	ug/L	ND	0.10	0.040	12/15/16 13:28	
Beryllium, Dissolved	ug/L	ND	0.10	0.010	12/15/16 13:28	
Cadmium, Dissolved	ug/L	ND	0.080	0.050	12/15/16 13:28	
Chromium, Dissolved	ug/L	ND	0.50	0.090	12/15/16 13:28	
Cobalt, Dissolved	ug/L	ND	0.10	0.010	12/15/16 13:28	
Copper, Dissolved	ug/L	0.21J	0.50	0.11	12/15/16 13:28	
Lead, Dissolved	ug/L	ND	0.10	0.090	12/15/16 13:28	
Molybdenum, Dissolved	ug/L	ND	0.50	0.11	12/15/16 13:28	
Nickel, Dissolved	ug/L	ND	0.50	0.44	12/15/16 13:28	
Selenium, Dissolved	ug/L	ND	0.50	0.31	12/15/16 13:28	
Thallium, Dissolved	ug/L	ND	0.10	0.015	12/15/16 13:28	
Vanadium, Dissolved	ug/L	ND	0.30	0.070	12/15/16 13:28	

LABORATORY CONTROL SAMPLE: 1888524

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	ug/L	100	98.5	98	85-115	
Arsenic, Dissolved	ug/L	100	99.7	100	85-115	
Beryllium, Dissolved	ug/L	100	105	105	85-115	
Cadmium, Dissolved	ug/L	100	98.2	98	85-115	
Chromium, Dissolved	ug/L	100	97.8	98	85-115	
Cobalt, Dissolved	ug/L	100	100	100	85-115	
Copper, Dissolved	ug/L	100	102	102	85-115	
Lead, Dissolved	ug/L	100	96.9	97	85-115	
Molybdenum, Dissolved	ug/L	100	97.2	97	85-115	
Nickel, Dissolved	ug/L	100	104	104	85-115	
Selenium, Dissolved	ug/L	100	101	101	85-115	
Thallium, Dissolved	ug/L	100	96.4	96	85-115	
Vanadium, Dissolved	ug/L	100	100	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888525 1888526

Parameter	Units	92322872001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony, Dissolved	ug/L	ND	100	100	98.2	103	98	103	70-130	4	20	
Arsenic, Dissolved	ug/L	0.15	100	100	99.0	101	99	101	70-130	2	20	
Beryllium, Dissolved	ug/L	0.019J	100	100	103	105	103	105	70-130	1	20	

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888525											
1888526											
Parameter	Units	92322872001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Cadmium, Dissolved	ug/L	ND	100	100	97.8	101	98	101	70-130	3	20
Chromium, Dissolved	ug/L	0.21J	100	100	96.5	100	96	100	70-130	4	20
Cobalt, Dissolved	ug/L	0.10	100	100	99.2	103	99	103	70-130	4	20
Copper, Dissolved	ug/L	0.77	100	100	102	107	102	106	70-130	4	20
Lead, Dissolved	ug/L	ND	100	100	96.3	101	96	101	70-130	5	20
Molybdenum, Dissolved	ug/L	0.43J	100	100	96.8	99.9	96	99	70-130	3	20
Nickel, Dissolved	ug/L	0.50	100	100	101	106	101	105	70-130	5	20
Selenium, Dissolved	ug/L	ND	100	100	97.7	99.5	98	99	70-130	2	20
Thallium, Dissolved	ug/L	ND	100	100	97.6	103	98	103	70-130	5	20
Vanadium, Dissolved	ug/L	0.76	100	100	99.1	102	98	101	70-130	2	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888527											
1888528											
Parameter	Units	92322877002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Antimony, Dissolved	ug/L	0.34J	100	100	100	102	100	102	70-130	2	20
Arsenic, Dissolved	ug/L	0.088J	100	100	99.0	103	99	103	70-130	4	20
Beryllium, Dissolved	ug/L	ND	100	100	100	104	100	104	70-130	4	20
Cadmium, Dissolved	ug/L	ND	100	100	97.0	101	97	101	70-130	4	20
Chromium, Dissolved	ug/L	0.25J	100	100	97.7	99.9	97	100	70-130	2	20
Cobalt, Dissolved	ug/L	0.24	100	100	97.3	100	97	100	70-130	3	20
Copper, Dissolved	ug/L	1.3	100	100	101	104	99	102	70-130	3	20
Lead, Dissolved	ug/L	ND	100	100	94.5	99.5	95	99	70-130	5	20
Molybdenum, Dissolved	ug/L	2.1	100	100	101	102	98	100	70-130	1	20
Nickel, Dissolved	ug/L	2.0	100	100	101	103	99	101	70-130	2	20
Selenium, Dissolved	ug/L	ND	100	100	94.9	102	95	102	70-130	7	20
Thallium, Dissolved	ug/L	ND	100	100	94.5	101	94	101	70-130	7	20
Vanadium, Dissolved	ug/L	2.4	100	100	102	105	100	102	70-130	2	20

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

QC Batch: 340547

Analysis Method: SM 2320B

QC Batch Method: SM 2320B

Analysis Description: 2320B Alkalinity

Associated Lab Samples: 92322876001, 92322876002

METHOD BLANK: 1888705

Matrix: Water

Associated Lab Samples: 92322876001, 92322876002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	5.0	1.0	12/13/16 21:53	
Alkalinity, Total as CaCO ₃	mg/L	ND	5.0	1.0	12/13/16 21:53	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	5.0	1.0	12/13/16 21:53	

LABORATORY CONTROL SAMPLE: 1888706

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	50	47.7	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888707 1888708

Parameter	Units	92322695013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	339	50	50	390	394	102	111	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888709 1888710

Parameter	Units	92322704003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO ₃	mg/L	ND	50	50	50.1	50.4	100	100	80-120	1	25	

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

QC Batch: 340794

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 92322876001, 92322876002

METHOD BLANK: 1890239

Matrix: Water

Associated Lab Samples: 92322876001, 92322876002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	12/14/16 20:42	

LABORATORY CONTROL SAMPLE: 1890240

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	224	90	90-110	

SAMPLE DUPLICATE: 1890241

Parameter	Units	92322949004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		5	

SAMPLE DUPLICATE: 1890242

Parameter	Units	92322877002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	273	299	9	5	D6

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

QC Batch: 340920

Analysis Method: SM 2540D

QC Batch Method: SM 2540D

Analysis Description: 2540D Total Suspended Solids

Associated Lab Samples: 92322876001, 92322876002

METHOD BLANK: 1891241

Matrix: Water

Associated Lab Samples: 92322876001, 92322876002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	2.5	2.5	12/14/16 19:40	

LABORATORY CONTROL SAMPLE: 1891242

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Suspended Solids	mg/L	250	226	90	90-110	

SAMPLE DUPLICATE: 1891244

Parameter	Units	92322877004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	6.3	7.8	20	5	D6

SAMPLE DUPLICATE: 1891304

Parameter	Units	92322841001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	1010	760	28	5	D6

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

QC Batch: 340775

Analysis Method: SM 4500-S2D

QC Batch Method: SM 4500-S2D

Analysis Description: 4500S2D Sulfide Water

Associated Lab Samples: 92322876001, 92322876002

METHOD BLANK: 1890149

Matrix: Water

Associated Lab Samples: 92322876001, 92322876002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.10	12/14/16 12:45	

LABORATORY CONTROL SAMPLE: 1890150

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	.5	0.51	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1890151 1890152

Parameter	Units	92323130001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	.5	.5	0.52	0.51	103	103	80-120	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1890153 1890154

Parameter	Units	92322877003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	.5	.5	0.38	0.38	74	73	80-120	1	10 M1	

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

QC Batch: 339808

Analysis Method: EPA 218.7

QC Batch Method: EPA 218.7

Analysis Description: Chromium, Hexavalent IC

Associated Lab Samples: 92322876001, 92322876002

METHOD BLANK: 1822832

Matrix: Water

Associated Lab Samples: 92322876001, 92322876002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	ug/L	ND	0.025	0.0082	12/20/16 19:45	

LABORATORY CONTROL SAMPLE: 1822833

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	.075	0.078	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1822834 1822835

Parameter	Units	92322890016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	ug/L	0.013J	.075	.075	0.081	0.084	90	94	85-115	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1822836 1822837

Parameter	Units	92322872004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	ug/L	ND	.5	.5	0.46J	0.57	93	114	85-115		20	

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

QC Batch: 341583

Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2

Analysis Description: 353.2 Nitrate + Nitrite, preserved

Associated Lab Samples: 92322876001, 92322876002

METHOD BLANK: 1895287

Matrix: Water

Associated Lab Samples: 92322876001, 92322876002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.020	0.010	12/21/16 18:14	

LABORATORY CONTROL SAMPLE: 1895288

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1895289 1895290

Parameter	Units	92322876001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.10	2.5	2.5	2.7	2.7	103	105	75-125	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1895291 1895292

Parameter	Units	92323208008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.59	2.5	2.5	3.1	3.2	101	103	75-125	2	10	

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

QC Batch: 341404

Analysis Method: SM 5310B

QC Batch Method: SM 5310B

Analysis Description: 5310B TOC

Associated Lab Samples: 92322876002

METHOD BLANK: 1894411

Matrix: Water

Associated Lab Samples: 92322876002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.50	12/20/16 03:54	

LABORATORY CONTROL SAMPLE: 1894412

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	25	23.2	93	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1894413 1894414

Parameter	Units	92322876002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	ND	25	25	23.5	23.6	94	94	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1894415 1894416

Parameter	Units	92323208006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	0.67J	25	25	24.1	24.2	94	94	90-110	0	10	

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QUALITY CONTROL DATA

Project: BELEWS J16090796

Pace Project No.: 92322876

QC Batch: 341707

Analysis Method: SM 5310B

QC Batch Method: SM 5310B

Analysis Description: 5310B TOC

Associated Lab Samples: 92322876001

METHOD BLANK: 1895789

Matrix: Water

Associated Lab Samples: 92322876001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.50	12/20/16 13:05	

LABORATORY CONTROL SAMPLE: 1895790

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	25	23.5	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1895791 1895792

Parameter	Units	92322292003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	3.8	25	25	27.4	27.8	94	96	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1895793 1895794

Parameter	Units	92323216002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	1.5	25	25	25.1	25.4	94	96	90-110	1	10	

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QUALIFIERS

Project: BELEWS J16090796

Pace Project No.: 92322876

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-M Pace Analytical Services - Minneapolis

PASI-O Pace Analytical Services - Ormond Beach

PASI-W Pace Analytical Services - Greenwood

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: BELEWS J16090796

Pace Project No.: 92322876

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92322876001	NORTH OF S-10+11	RSK 175	453165		
92322876002	EB-JJZ-1	RSK 175	453165		
92322876001	NORTH OF S-10+11	EPA 300.0	340766		
92322876002	EB-JJZ-1	EPA 300.0	340766		
92322876001	NORTH OF S-10+11	EPA 200.7	340496	EPA 200.7	340731
92322876002	EB-JJZ-1	EPA 200.7	340496	EPA 200.7	340731
92322876001	NORTH OF S-10+11	EPA 200.7	340915	EPA 200.7	341058
92322876001	NORTH OF S-10+11	EPA 200.7	341069		
92322876002	EB-JJZ-1	EPA 200.7	341069		
92322876001	NORTH OF S-10+11	EPA 200.8 Rev 5.4	340490	EPA 200.8 Rev 5.4	340705
92322876002	EB-JJZ-1	EPA 200.8 Rev 5.4	340490	EPA 200.8 Rev 5.4	340705
92322876001	NORTH OF S-10+11	EPA 200.8 Rev 5.4	340493	EPA 200.8 Rev 5.4	340712
92322876001	NORTH OF S-10+11	EPA 1631E	340763	EPA 1631E	340765
92322876002	EB-JJZ-1	EPA 1631E	340763	EPA 1631E	340765
92322876003	NORTH OF S-10 + 11 BLANK	EPA 1631E	340763	EPA 1631E	340765
92322876004	EB-JJZ-1 BLANK	EPA 1631E	340763	EPA 1631E	340765
92322876001	NORTH OF S-10+11	SM 2320B	340547		
92322876002	EB-JJZ-1	SM 2320B	340547		
92322876001	NORTH OF S-10+11	SM 2540C	340794		
92322876002	EB-JJZ-1	SM 2540C	340794		
92322876001	NORTH OF S-10+11	SM 2540D	340920		
92322876002	EB-JJZ-1	SM 2540D	340920		
92322876001	NORTH OF S-10+11	SM 4500-S2D	340775		
92322876002	EB-JJZ-1	SM 4500-S2D	340775		
92322876001	NORTH OF S-10+11	EPA 218.7	339808		
92322876002	EB-JJZ-1	EPA 218.7	339808		
92322876001	NORTH OF S-10+11	EPA 353.2	341583		
92322876002	EB-JJZ-1	EPA 353.2	341583		
92322876001	NORTH OF S-10+11	SM 5310B	341707		
92322876002	EB-JJZ-1	SM 5310B	341404		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
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	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: Sept. 21, 2016 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.01	Issuing Authority: Pace Quality Office

Laboratory receiving samples:
 Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☒ Raleigh ☐ Mechanicsville ☐

Sample Condition Upon Receipt

Client Name:

Project #:

WO#: 92322876



Courier:
☐ Commercial
☒ Fed Ex
☐ UPS
☐ USPS
☐ Other: _____
☒ Pace
☐ Client

Custody Seal Present? ☐ Yes ☒ No
 Seals Intact? ☐ Yes ☒ No

Date/Initials Person Examining Contents: BVH
BV 12/12

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other: _____
 Thermometer: ☒ IR-Gun ID: T1603 Type of Ice: 4.1
☒ Wet ☐ Blue ☐ None

Biological Tissue Frozen? ☐ Yes ☒ No ☐ N/A
☒ Samples on ice, cooling process has begun

Correction Factor: _____ Cooler Temp Corrected (°C): _____
 Temp should be above freezing to 6°C
USDA Regulated Soil ☒ N/A, water sample
 Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?
☐ Yes ☒ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	Note if sediment is visible in the dissolved container
Samples Field Filtered?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	9.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		

Field Data Required? ☐ Yes ☐ No

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: _____
 Comments/Sample Discrepancy: _____

Date/Time: _____


Project Manager SCURF Review: Kut

Date: 12/12/16

Project Manager SRF Review: Kut

Date: 12/12/16

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers)

	Document Name:	Document Revised: Sept. 21, 2016
	Sample Condition Upon Receipt(SCUR)	Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.01	Issuing Authority: Pace Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

**Bottom half of box is to list number of bottles

Project #

WO# : 92322876

PM: KLH1

Due Date: 12/19/16

CLIENT: 92-Duke Ener

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP3S-250 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP3Z-250 mL Plastic ZN Acetate & NaOH (>9)	BP3C-250 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BPIN	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	Cubitainer	VSGU-20 mL Scintillation vials (N/A)	GN
1			1	1	1	4	1									3								3	1			
2												2																
3			1	1	1	2	1									3			3					3	1			
4												2																
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM

Duke Energy Analytical Laboratory
 Chain of Custody & Sample Log
 Project Name: CSA AB GW Assessment water
 Client: Duke Energy
 Business Unit: Duke Energy
 Project ID: Activity ID: Station: ELEMS
 Mail Code: MG03A3
 Phone No: 980-875-5032
 Fax No: 980-875-5032
 Mail Code: MG03A3
 Phone No: 980-875-5032

Order # 1142089
Matrix GW, WW
Logged By [Signature]
Date & Time 4/1
Vendor [Signature]
PO # Shealy # 1142089
Element 1 # 1142133
Filteration (0.45 um) [X]
Preservative [X]
Container Volume (mL) 1000
Container Type PET
Unfiltered [X]
Filtered [X]
Phosphoric Acid [X]
Hex Chrom [X]
Radium 226 [X]
Radium 228 [X]
LL Hg [X]
Metals (see below) [X]
Dissolved Metals [X]
Total # Containers 1

Original to Lab, Copy to Client
COC REV DATE 1/22/2015
Page 1 of 1
DISTRIBUTION
Page 54 of 54

Sample	Sample Description or ID	Customer to complete all appropriate non-shaded areas.																			
		Collection Information			Comp.	Grab	TSS	TDS	Methane RSK-175	Cl, SO4	Alkalinity, Bicarbonate, Carbonate	Sulfide	TOC	Nitrate-Nitrite	Hex Chrom 218.7	Radium 226 Radium 228	LL Hg	Metals (see below)	Dissolved Metals	Total # Containers	
		Date	Time	Signature																	
1	NC-14-015-10-11	12/04/14	1430	[Signature]	X	X	1	1	1	1	1	1	1	3	1	1	3	1	1	1	20
2	NC-14-015-10-11 BLANK	12/04/14	1430	[Signature]	X	X	1	1	1	1	1	1	1	3	1	1	3	1	1	1	20
3	EG-05Z-1	12/04/14	1530	[Signature]	X	X	1	1	1	1	1	1	1	3	1	1	3	1	1	1	20
4	EG-05Z-1 BLANK	12/04/14	1530	[Signature]	X	X	1	1	1	1	1	1	1	3	1	1	3	1	1	1	20
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					

Relinquished By [Signature] **Date/Time** 12/04/14/1730
Accepted By [Signature] **Date/Time** 01/20/15
Relinquished By [Signature] **Date/Time** 01/20/15
Accepted By [Signature] **Date/Time** 01/20/15
Sealed/locked By [Signature] **Date/Time** 01/20/15
Sealed/lock Opened By [Signature] **Date/Time** 01/20/15
Comments
 ELEMENTS by ICP MS (TRM): As, Ba, Cd, Co, Cr, Cu, Mo, Ni, Pb, Sb, Se, Ti (LL), V (LL)
 ELEMENTS by ICP (TRM): Al, Ba, B, Fe, Mn, Sr, Zn
 Dissolved metals: all metals ICP, IMS, Hg
 ICP Undigested Ca, Mg, K, Na
 Hg by 245.1
 Customer, Important: please indicate desired turnaround
 Requested Turnaround
 14 Days
 7 Days
 48 Hr
 Other ASAP
 Add. Cost Will Apply